



The Daedalean

Semper Discens

*Monthly Aerospace Education Newsletter of the Connecticut
Wing of the Civil Air Patrol*

*Stephen M. Rocketto, Capt., CAP
Director of Aerospace Education
CTWG
srocketto@aquilasys.com*

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CALENDAR

For Future Planning

23-26 JUN-National AEO School-Pensacola
31 JUL-07 AUG-CTWG Encampment
12-14 AUG-AEO School-USAF Museum
21 AUG-CTWG Rocket Contest-Tentative
22-24 OCT-CTWG Conference

2010 COMMANDER'S CUP WING ROCKETRY CONTEST

Rules Clarification and Amendments

1. Spin stabilization is allowed.
2. Flight Three-Free Form Competition promotes load bearing rockets, historical rockets, and multistage rockets, all of which are applicable to the CAP Rocketry Badge.
3. The most probable date for the contest is Saturday, 21 August.

Here are the rules:

Flight 1: Tyro Cadets will build an Estes Alpha or Quest Astra 1 decorated in a Civil Air Patrol

Theme. The entry will be judged on construction, finish, and flight. Each first year Cadet in a Squadron may enter one rocket. A Tyro Cadet is a Cadet who has never participated in the Wing contest. (CAVEAT-The Alpha is the model with balsa fins. Do not order the Alpha III with plastic fins for this contest.)

Flight 2: Altitude Competition-Build a rocket, kit or scratch, which will use a standard engine which will be supplied by the Wing. This will be the same engine for all and will be either an 1/2A, A, or B engine, all of which have the same dimensions (2.75 in x 0.69 in). Your entry must accept this size engine. Judging will be based on maximum altitude reached. Each Squadron may enter two rockets for one flight each and the best of the two flights will be counted.

Flight 3: Free Form Competition-Each Squadron may enter two scratch built rockets powered by a D engine. Judging will be based on construction, finish, and flight.

Finish points will be based on sanding, contouring of fins, joins of fins to fuselage, and alignment of fins. Finish will be based upon quality of paint application, neatness of decal or marking application, and appropriate markings and colors.

Altitude will be judged on the basis of a number of measurements, the high and low of which will be discarded.

Flight will be judged on a vertical climb, and proper deployment of recovery device.

A scoring rubric will be developed and sent out for comments.

Squadrons are responsible for purchasing rockets, engines, igniters, and wadding except for Flight 2, altitude rockets, in which case, the Wing will supply the engines. CATO will supply launch services.

5. Obtaining Supplies: Here are some suggested websites for information on obtaining rockets, engines, and supplies in bulk. No endorsement is meant or implied by these recommendations.

- A. <http://www.estesrockets.com>
- B. <http://www.questaerospace.com>
- C. <http://www.acsupplyco.com> (offers bulk discounts)/CAP Model Rocketry section

If you have any questions, please contact me. MAJ Stephen Rocketto, *Raketekampfdirektor* at srocketto@aquilasys.com.

NEW YEAGER AWARDEES

CT-042

*2Lt Glen H. Dains
2Lt Joseph E. Bisnov
SM Ralph C. Langhams
SM Adam H Williams*

CT-073

SM John A. Franco

AVIATION CURRENT EVENTS AND HISTORY MILEPOSTS

Current Events

Record Hypersonic Sustained Flight

A new record for sustained hypersonic flight was set by the X-51A Waverider on 26 May. The unmanned vehicle was launched from a Boeing B-52 Stratofortress at the Navy's Point Mugu, California testing range. Built by Boeing and powered by a Pratt & Whitney Rocketdyne scramjet, the vehicle uses the supersonic shock wave generated by its flight to improve the lift to drag ratio.

After falling free from the mother ship, the vehicle was boosted to Mach 4.5 by an Army booster rocket. At that point, the scramjet engine ignited



*Boeing X-51A Waverider
USAF Photo*

The vehicle is designed to explore a wide range of problems such as involved in hypersonic (Mach 5+): thermal, structural, and control.

The scramjet engine (supersonic combustion ramjet) has its own set of problems. Maintaining combustion has been likened to trying to keep a candle lit in a hurricane. The flow of the intake air, compressed by the high speed of the craft, rather than by turbines, must be carefully moderated in order to assure proper engine functioning. However, slowing the incoming air has its price in that the temperature and pressure increases radically, stressing the materials from which the engine is constructed.

Increased Use of Flying Testbeds by Engine Manufacturers

Aviation Week and Space Technology magazine reports that the industry is making increased use of flying testbeds despite the availability of wind tunnels and computer simulations.

Using aircraft to test new engines in flight is not a new idea. Both Pratt and Whitney and Curtiss-Wright flew B-17s with a fifth engine mounted in the nose as part of their post World War II development programs. The Pratt '17 was in the Bradley Air Museum when a tornado struck in 1979. Its wreckage was salvaged and has been rebuilt.



Boeing B-17 "Testbed" showing engine mount inside nose.

Pratt & Whitney Canada flies a Boeing 720 which, in addition to its normal four turbojets, in one configuration, had a nose mounted turbo prop and a sixth turbine engine mounted on the side of the fuselage. Another tactic is to replace one of the engines on a multiengined aircraft with a different kind of engine.



P&W Canada's Boeing 720 aerial testbed

At the present time, Boeing is operating 737s and 777s as flying testbeds and is adding 747s to the fleet. Honeywell is preparing a Boeing 757 for similar duties. General Electric uses a 747. The aircraft are also available for lease to other manufacturers or testing agencies.

The advantage of using flying testbeds is that it provides the opportunity to study the performance of the engine throughout its full range of operating conditions

Shuttle Atlantis Returns

Ending 25 years of service, the orbiter *Atlantis* landed at Cape Canaveral on 26 May after a 12 day mission to the International Space Station. This 34th foray into space for *Atlantis* placed about 25,000 pounds of material in orbit including

the five ton Russian *Rassvet* research module. *Atlantis* will serve as backup for the upcoming *Endeavour* mission. A final flight may occur pending White House approval.

History Milestones

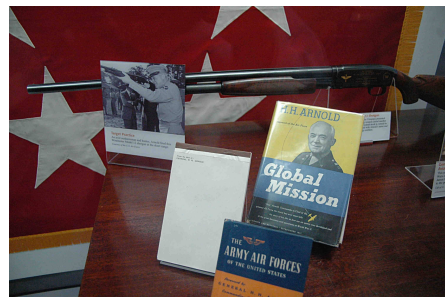
2 June, 1957-Capt Joseph Kittinger flies the first solo balloon flight into the stratosphere reaching 96,000 feet.

10 June, 1959-Scott Crossfield takes the Douglas D-558-1 Skystreak on its maiden flight.



Douglas Skystreak at the old Naval Aviation Museum, Pensacola, Florida

20 June, 1941-The United States Army Air Force is established under the command of Maj. Gen. H.H. Arnold.



Hap Arnold's book, five star flag, and Winchester Model 12 shotgun

27 June, 1950-Flying a North American F-82G, Twin Mustang, Lt. William G. Hudson, pilot, and Lt. Carl Fraser, radar operator, score the first aerial victory of the Korean Police Action when the shoot down a Yak-11 over Kimpo Airfield.



Twin Mustang on display at Lackland AFB

AEROSPACE EDUCATION NOTIFICATIONS

The latest AE Newsbrief from CAP NHQ may be viewed at:

http://members.gocivilairpatrol.com/aerospace_education/stay_informed/ae_newsbriefs.cfm

FAVORITE AVIATION MOVIES

Last month, *The Coastwatcher*, the weekly newsletter of the Thames River Composite Squadron solicited its readers to submit nominations of their favorite aviation movies. The request for reader submissions about favorite flying movies brought the greatest number of replies ever received by *The Coastwatcher*. Around a dozen and a half readers submitted candidates and comments. The final tally indicates three movies nominated for music, eleven movies cited for a "great scene," one listed for a "personal reason," and twenty listed in the "best/favorite" classification.

Part One

Films reviewed in this section cover the early years of aviation, from World War One through the barnstorming decade.

The Coastwatcher's flying flicks feature opens with two films nominated for music. Capt Art Dammers at the 103rd, a motorcyclist, has his passions aroused by the rendition of "Danger Zone" from 1956's *Top Gun*. Dammers forwards these lyrics:

*Revvin' up your engine
Listen to her howlin' roar
Metal under tension
Beggin' you to touch and go*

The second film nominated was *Dr. Strangelove (1964)* for its artful climax which is an artful juxtaposition of anti-war sentiment and the devotion of a USAF crew struggling to fly their battle damaged B-52 to its target as the rousing strains of the song "Johnny Comes Marching Home" plays in the background.

Ironically, this song is a joyful US Civil War piece celebrating the safe return of soldiers but is based upon the anti-war Irish song, "Johnny, I Hardly Knew Ye," a lament to the many Irish maimed in the service of Great Britain.

Another film was nominated and then selected by the editor for a singular reason. This film is the 1955 release, *The McConnell Story*, starring Alan Ladd and June Allyson. Ladd plays Joseph C. McConnell, Jr. The nominator, Alcino Almeida, served with the protagonist of the film. They served together in Korea in the 39th Fighter Interceptor Squadron.

McConnell was a Dover, New Hampshire native who served as a B-24 navigator in World War II. After the war, he earned his pilot's wings and distinguished himself during the Korean Police Action, flying the F-86 Sabre and shooting down 16 MiGs to become both the top scoring US ace in the Korean conflict and the top scoring US jet ace.

Returning from Korea, McConnell was assigned to test duties. On 25 August, 1954, Capt. McConnell was test flying an F-86H Sabre when a maintenance mistake resulted in the loss of elevator control. McConnell attempted to land the aircraft using power and trim but was killed when forced to abandon the aircraft at an altitude which did not allow his parachute to fully deploy.



North American F-86H Sabre

Ironically, a movie about McConnell, tentatively entitled *Tiger in the Sky*, was just going into production when he was killed. The film was rescripted and renamed *The McConnell Story*.

Strategic Air Command, released in 1954, was nominated by LtCol Anthony Vallilo, Wing Standards and Evaluation Officer. LtCol Vallillo is a retired American Airlines Captain and USAF Air Mobility Command veteran.

In this movie, Jimmy Stewart, a USAF Reserve Brigadier General who flew B-24s in Europe in the Second World War plays a WWII vet and St. Louis Cardinals ballplayer, Dutch Holland, who is recalled to fly the B-36 and B-47 during the Cold War. June Allyson plays the same role which she did in *The McConnell Story*, the loving and supportive wife. Oddly enough, Stewart and

Allyson reprised their roles in an earlier baseball movie, *The Stratton Story* (1949), about a ballplayer who loses a leg but struggles to continue a career in baseball.



Consolidated B-24 Liberator at the American Air Museum, Duxford, Cambridgeshire, England



Stewart's World War Two blouse displaying his wings, Distinguished Flying Crosses, and Air Medals.

As you might expect from a Std/Eval Officer, LtCol Vallilo has four criteria for a good aviation movie. It treats aviation realistically, both visually and procedurally, has an interesting and compelling story, has a maximum use of real airplane footage versus models or computer generated visuals, and has good acting and good casting. He is critical of this film for some use of models but he admits that "...they are well done, and the real ground and air photography is outstanding, especially if you like the B-36 and B-47. Solid acting by a great supporting cast brings the story to life, and there is more than one dramatic moment along the way."



Convair B-36 Peacemaker

LtCol Carl Stidsen, Wing Inspector General and a former member of the Strategic Air Command agrees with LtCol Vallillo. His favorite scene is

...the startup / taxi out / run-up/takeoff /climbout/flight of the B-36. The later B-36 crash scene is obviously a model, but is well done. The B-47 taxi and takeoff scenes later in the movie are also impressive. Great music throughout, but "Bombers High" is ever so true a reflection of the 1950's cold War attitude.



Boeing B-47E Stratojet

Tom Morehouse of the New England Air Museum also lists Strategic Air Command as a favorite.

The early days of aviation are represented by *Wings*, *Dawn Patrol*, *The Blue Max*, *The Spirit of*

St. Louis, and *The Great Waldo Pepper*:

John LaMonica, an old New Mexico flying buddy of the Editor used to say that the only good aviation pictures had airplanes with axles between the wheels and these five pictures come close to fulfilling that criterion.

Roger McQuiggan, a retired Connecticut Guardsman and a teacher of film and Latin reminds us that the silent film *Wings* (1927) won the first Oscar ever awarded for best picture and a second for best effects. William Wellman, a World War I aviator with the *Lafayette Flying Corps*, directed the picture. The writer was flyer John Monk Saunders who also has credit for *Dawn Patrol* (1930 version), *The High and the Mighty* and *Island in the Sky*.

Maj Rocketto recalls a powerful scene. Buddy Rogers and Richard Arlen have just reported to a training base. In their tent they meet a senior cadet named White played by Gary Cooper. White has just awakened from a nap and they question him about good luck charms. He says that when your time is up, it is up and charms are useless. Cooper is eating a candy bar and says that he must leave to do some flying. He tosses the half eaten bar on his bunk. Shortly thereafter, his plane crashes and as the ambulances race to the burning wreckage, Rogers and Arlen stare at the half eaten candy.

The Dawn Patrol was made in two versions, one in 1930 and one in 1938. The 1930 version starred Richard Barthelmess and Douglas Fairbanks, Jr. and won the Oscar for best writing for John Monk Saunders. It has been retitled *Flight Commander* for television to avoid confusion with the 1938 version. The 1938 version stars Errol Flynn, David Niven, and Basil Rathbone.

The story centers around the loneliness and the strain of command for a Royal Flying Corps. Squadron leader who must send half trained boys into combat in inferior aircraft. When the Commander's chief critic inherits the squadron and

must make the life and death decisions for his subordinates, he comes to understand the awesome responsibility of authority, a what St. Exupery called the "heavy load of victory." This same theme recurs in the World War Two drama, *Twelve O'Clock High*.

A scene in the mess highlights the pathos of the war. One of the officers starts singing the pilot's mournful and cynical toasting song:

*So, stand to your glasses steady,
This world is a world full of lies.
Here's a toast to those dead already,
And here's to the next man to die.*

Meanwhile, all around, the Squadron is engaged in tom-foolery as they drink and try to forget the horrors of the past day and those which await them tomorrow.

The German side of "The Great War" is portrayed in *The Blue Max* (1966). George Peppard plays Bruno Stachel, an ambitious, cunning, and ruthless fighter pilot of a low social class, eager to earn Germany's highest military honor, the "*Pour le Merite*," a blue enameled Maltese Cross. The first aviator to earn the medal was Max Immelmann for downing eight enemy aircraft. Thereafter the medal was known as the "Blue Max."



*Olde Rhinebeck Aerodrome Fokker Dr. I
reproduction similar to planes flown by Stachel
and von Klugermann*

Peppard engages in a rivalry with the aristocratic Willi von Klugermann, played by Jeremy Kemp. In one of the great scenes, a favorite of LtCol

Stidsen, Stachel and von Klugermann engage in multiple passes under a low bridge until von Klugermann misjudges and is killed. After the crash, Stachel claims a victory for himself which, in fact, belongs to his dead rival. He earns the "Blue Max." When his dishonesty is discovered, a superior officer, offended by Stachel's ungentlemanly behavior, arranges for Stachel, now a national hero, to test fly a defective aircraft in which he suffers a "hero's" death.

The punishment of evil satisfies the normal moral code of the cinema but in the original story, written by former US counter intelligence officer, Jack Hunter, Stachel survives and as the war ends, is making friends with Hermann Goering!

The Great Waldo Pepper (1975), a film directed by George Roy Hill, a USMC transport pilot in WWII and a Marine fighter pilot in Korea, takes place during the barnstorming era. Pepper, played by Robert Redford, is an ex-Army pilot who regrets the fact that he never got overseas to fight and is therefore somewhat inventive about his military past. His friend Ezra Stiles constructs a monoplane which leads to one of the most chilling scenes in cinema. Stiles aircraft suffers a structural failure, crashes, and he is trapped in the wreckage. A gaggle of gawkers rushes to the scene. One of them has a cigarette in hand which ignites the fuel. Ezra is trapped in the flaming wreck and screams for help. Waldo rushes to his aid but is unable to free his friend. To end Ezra's suffering, Waldo seizes a piece of timber and strikes him over the head, either killing him or rendering him unconscious.

Another character, Dillhoeffler, is a classic huckster who employs Pepper in his flying circus as they barnstorm the midwest. Eventually, Pepper meets Ernst Kessler, an Ernst Udet-like German ace from the war. Waldo, like Miniver Cheevey, longs for the days gone by and Kessler, disillusioned, his glory days past, suffering from the ennui of civilian life, arranges to meet Pepper in a duel in the sky. In an ambiguous ending, their aircraft

severely damaged, both fliers fade into a milky sky.

The Spirit of St. Louis (1957) stars James Stewart as Charles Lindbergh and relates the details of Lindbergh's famous solo trans-Atlantic flight. The film is a series of flashbacks which delineate the "Lone Eagle's" aviation career, from his days barnstorming and flying the air mail to his struggle to gain support for his New York to Paris flight. Lindbergh's success captured world attention and his good looks and modesty made him a icon of the age.

LtCol Vallilo applies his criteria to "Spirit" and comments that

Stewart fought hard to get this role, despite being several decades older than Lindy was at the time of the Paris flight. Stewart's acting is superb, the cinematography is outstanding and all of the airplane shots are real. As for the story - what could be more compelling than that famous flight!



The original Spirit of St. Louis enshrined in the National Air and Space Museum, The Mall, Washington

Part Two World War II

The 1930s were marked by the financial and social strains of the stock market collapse and the aggressive acts of the fascist military dictatorships which were to form the loose alliance known as The Axis.

Seeking to recover the past glory of the Roman Empire, Benito Mussolini sent his fascist army into Ethiopia, Germany fell into the grips of Adolph Hitler and the National Socialist Party. The Versailles Treaty was repudiated, the Rhineland was remilitarized, Czechoslovakia was conquered, and the Austrian Anschluss resulted in the annexation of Austria into the Third Reich. In the Far East, the Japanese Empire seized Manchuria and invaded China.

Neville Chamberlain, the British Prime Minister met with Herr Hitler and the leaders of France and Italy in Munich. An agreement was reached selling out the Czechoslovak nation. On 30 September, 1938, Chamberlain met personally with Hitler and got Hitler to agree to a non-aggression treaty between Germany and Great Britain and was given a signed piece of paper guaranteeing "peace in our times. Eleven months later, on 01 September, 1939, Germany invaded Poland establishing the accepted date for the start of World War II.

This edition's reviews will cover the WWII period in roughly historical order. During and after the war, many films were produced for propaganda purposes. Just about every flying billet was covered and varied aircraft missions. *Coastal Command, Bombardier, Aerial Gunner, Flying Leathernecks, Flying Tigers, A Yank in the RAF, The Purple Heart, and Wing and a Prayer.* Flight surgeons get their due in *Dive Bomber* and even blimps are recognized for their role in *This Man's Navy*.

However, our astute readership has been more discriminating and most eclectic in selecting six films, all of them post-war products, for discussion. They will be covered in more or less historical order.

Our most distant reader, Johan Visschedijk, an aviation expert in The Netherlands with a quarter century of aviation experience, and the Editor both

included *The Battle of Britain* (1969) on their lists. Mr. Visschedijk commented on the "...very impressive dog-fighting scenes..." and opined that the film was "...arguably one of the best aeronautical movies that ever appeared." The Editor agreed and added that the details of the problems faced by RAF Fighter Command were, within the limits of the screenplay, accurate and the actors represented some of the best of the British, nay, world-wide thespian community.



Heroes of The Battle of Britain, the glamorous Supermarine Spitfire and its dowdy sister, the workhorse Hawker Hurricane-RAF Museum, Hendon

LtCol Vallilo was impressed by *Tora, Tora, Tora.* (1970) He recalls that:

Tora Tora Tora is the best of the movies about WWII that are heavy on flying. The producers gathered many of the extant T-6's and modified them to look very much like the Zero and the other Japanese planes that attacked Pearl Harbor on December 7th. The story, of course, is superb and so is the acting, especially on the Japanese side. The use of subtitles over Japanese is excellent, and the later movie *Midway* is disappointing for the lack of it.



Replica Val, Kate, and Zero used in the filming of Tora, Tora, Tora. The aircraft were constructed from BT-13, BT-15, and T-6 airframes.

As an aside, after a two year stint in South America, the Editor was passing through Hawaii on his way east in 1969 and decided to take the "Pearl Harbor tour." As the excursion boat entered the harbor, our cameras were locked in the cuddy in accordance with security regulations. Immediately afterwards, I heard the sound of radial engines coming in fast from the south, looked up and saw two aircraft sporting the red *hinomaru*, what our WWII aviators called a "meatball" under each wing. The planes headed straight for Ford Island where I could make out the tripod and basket weave masts of the old US Pacific Fleet battleships. Explosions went off and an announcement was made that a movie was being made about the Pearl Harbor attack. But for about ten seconds, I was thrown back in a time warp to 07 December, 1941.

The US bomber effort in Europe added three films to our list of favorite movies. The Eighth Air Force operating out of England contributed two of these stories, *Memphis Belle* and *Twelve O'Clock High*.

Memphis Belle was inspired by a B-17G featured in a WWII documentary of the same name. The "Belle" achieved fame as the first B-17 to complete the then required 25 combat missions and returned to the United States to participate in bond drives. Once again, LtCol Tony "Two Thumbs Up" Valillo was the nominator. Once again, the use of real or replica aircraft appealed to him. He says:

Although the script bears virtually no resemblance to the actual last mission of the real *Memphis Belle*, according to Robert Morgan, the aircraft commander of the real airplane (even the names of the crew members are changed), this is still a great movie. The cinematography is superb and the use of real airplanes makes it a great visual film for B-17 lovers. A good percentage of the airworthy B-17's of the 1980's was used in the film.



The original Memphis Belle, Mud Island, Memphis, Tennessee circa the 1980s.



The Memphis Belle, currently undergoing refurbishment to display quality at the Museum of the USAF, Ohio.

The second Eighth Air Force epic, one of the most popular of the selected films was *Twelve O'Clock High* (1949).

LtCol Bergey, a retired Naval Aviator at Thames River Composite Squadron points out that

The military aviation leadership challenges faced by the main character is spot on. In fact the Navy uses this movie as part of our aviation leadership training program. Gregory Peck's portrayal of Brigadier General Savage is legendary. This movie is a must for anyone who intends to lead others during difficult or dangerous circumstances.

Two scenes were also specified by our readership as favorites. The first is when the old Squadron Adjutant, having returned to England after the war, spots a toby, a beer mug with a Robin Hood caricature on it in a shop window. It was the ornament, which when turned face out, announced that a mission was scheduled for the next day. He purchases the toby and then bicycles to his old

field, deserted and overgrown with weeds. As he peers down the runway, the sound of Wright R-1820 engines fills the air and he fades back to 1943.

The second scene is a B-17 wheels up landing. The legendary Paul Mantz executed this amazing feat of solo flying, something that many said could not be done. He was paid \$4,500 dollars, the largest sum ever paid to a stuntman to that time.

The third film about bombers, the black comedy, *Catch-22* (1970), was included because of one scene, a mass take off of B-25s. Stony Stonich, one of the pilots, describes the event:

Imagine sixteen airplanes lined up on the runway, all at 30 inches of manifold pressure. At brake release at one-to-two second intervals, each B-25 goes to takeoff power. This scene was used at the beginning of the

film. The wake turbulence was unbelievable. We did the shot four times. On the first two I was in the number two ship and the turbulence wasn't bad. On the third we were number nine and the turbulence was terrible. We found ourselves drifting left towards the next plane to takeoff, and with both of us on the controls we still couldn't stop the left drift. Then we hit the turbulence going the other way and shot to the right; what a ride! On the fourth takeoff we were number sixteen and we had a runaway propeller right after the gear came up. The prop governor had failed and we had to shut the engine down and feather the prop.



North American B-25J Mitchell, Passionate Paulette. This aircraft flew in Catch-22 and is displayed at the Grissom Air Museum.

Joseph Heller, the author of the book upon which the film was based, flew 60 combat missions as a B-25 bombardier in the 12th Air Force.

Roger McQuiggan, a Latin and English teacher from Southington recognized the message of *Catch-22*. So has the the USAF Academy which has adopted the novel to illustrate the dehumanizing effects of a bureaucracy on the spirit and actions of men.

Reader Ray Marineau, a long time aviator and Quiet Birdman was shocked when our original list did not include Ernest Gann's *Island in the Sky* (1953). He immediately protested.

I can't believe CAP hasn't mentioned my favorite movie!!! The movie, a classic crash and rescue story, follows the crew of a downed Douglas C-47, the military version of the venerable DC-3, trying to survive an emergency landing in the frozen wilderness near the Quebec-Labrador border after "icing-up" on a WWII supply run to England.



Douglas C-47 Skytrain at Lackland AFB

While most of movie tells about the crew trying to stay alive, my favorite part is the added story line of the searchers and their determination to find their fellow airmen, flying C-47's with, by today's standards, primitive navigation instruments, completing their search mission using the "age old" techniques of "time and distance", "grid or section flying", "triangulation", and "radio navigation and communications" to get the job done, while calculating for very strong "magnetic deviation" in the far north.

Gann was one of the search pilots in this "real life" story he experienced while flying for the Air Transport Command out of Presque Isle Airfield in Maine in 1943.

The end of the war was aptly depicted by a film, *The Best Years of Our Lives* (1946.) The opening depicts three veterans hitching a ride home and peering through the transparent nose of a B-17 at the American landscape beneath. One is a decorated bombardier The second serviceman is a Navy enlisted man who lost both hands when his ship was sunk. (The role was played by Harold Russell, an army veteran who did lose both of his hands in an accidental explosion and won an Oscar for his portrayal.) The third vet is an infantry sergeant who fought in the Pacific. Each carries his personal load of anxieties and trauma from their wartime experiences.

A scene, in which the distraught bombardier visits a "boneyard" where B-17s are being reduced to scrap. The revelation that the aircraft materials will be recycled for peaceful purposes crystallizes his thinking and becomes the first step in the restoration of his spirit. Similarly, each of the protagonists find ways to overcome the horrors of war and return to a more normal world.

L'Envoi

This last part of the "Favorite Flying Movies" series will tie up some loose ends and cover a few of the unusual and interesting facts which were discovered during the writing of the main parts of the article.

First, readers referred to two movies with tangential relationships to the main theme or subjects discussed in the main theme. The first was *Stalag 17* (1953), a story about US Army Air Force gunners, radio men, and flight engineers, all captured by the Germans after being shot down. The theme music is "When Johnny Comes Marching Home Again", the tune which is played

in the background as the B-52 crew in *Dr. Strangelove* fights their way to the target. In "Strangelove," the tune has a double irony. It is not only derived from an anti-war song but also refers to men returning in glory from wars. The crew of the B-52 will not be returning home. In fact, they will not have a home in which to return. A video clip may be viewed at:

<http://www.youtube.com/watch?v=INPNyNivNWA&feature=related>

The clip from *Dr. Strangelove*, in which the crew methodically runs through the checklist to open the jammed bomb bay doors may be found at:

<http://www.youtube.com/watch?v=JgHSDa2Jwqc&feature=related>

Hap Rocketto reminded us that *The Bridges at Toko-Ri* is enriched by the presence of the two helicopter rescue enlisted crewman. The pilot, Mike Forney, is an enlisted man. The services once had many enlisted men pilots although they were generally restricted in their duties. Perhaps the most famous of the Navy pilots was Floyd Bennett, famed for his polar flights with Richard Byrd. During World War Two, Army sergeants flew liaison aircraft and gliders and the Navy used petty officers, mostly in transport aircraft. Today, many Army aviators are Warrant Officers, the US Marines employ sergeants as navigators, and the Navy is returning Chief Warrant Officers to flight status for helicopter missions.

The scene in which Forney and Nestor Gamidge, attempt to save Lt. Brubaker may be found at:

<http://www.youtube.com/watch?v=6nPdVJQaci0>

Music has been mentioned as one one of the artistic elements which enriched the cinema.

Sometimes it is for the background effect as in the previously mentioned *Dr. Strangelove*. But

sometimes, it reveals something about the state of mind of the protagonists, evident in the mess scene in *The Dawn Patrol*. Carefully listen to the lyrics of "Stand to Your Glasses Steady" which is heard and shown at:

http://www.youtube.com/watch?v=_HdXdVvXc8w&feature=related

As an aside, the National Air and Space Museum on the Mall in Washington has been running a film on the flying movies of World War I that show this scene from *The Dawn Patrol* but they make a mistake in the libretto of the song which is displayed as subtitles. The phrase about the world is the cynical "world of lies," not the innocuous "world of life" as displayed on the screen.

The sound track of *The Right Stuff* includes suitable music. Yeager's flight in the NF-104 in which he pronounces that "I think I see an airplane over here with my name on it," is one orchestral theme fitted perfectly to the scenes, heralding the launch of a flight of high adventure and the triumph of a remarkable survival. The scene may be seen and heard at:

<http://www.youtube.com/watch?v=jlsWD1-fmIk&feature=related>

The other *The Right Stuff* scene mentioned in *The Coastwatcher* feature involved "The Demon" which lurks at Mach One and Yeager's horseback ride during which he and his steed encounter the "X-1." For this scene, go to:

<http://www.youtube.com/watch?v=GQKb3drC1pI&feature=related>

The character of Jack Ridley is a sketch of the real Col Jack Ridley, a test pilot and aeronautical engineer who studied under the aerodynamicist Theodore von Karman at the California Institute

of Technology. When Yeager and Bob Hoover were selected as the Air Force X-1 pilots, Ridley was assigned as Project Engineer. Ridley made major improvements to the control system of the X-1 and served as a technical mentor to Yeager who had little formal engineering education. Ridley "went West" when an aircraft in which he was a passenger crashed in Japan. This was some five years or so before Yeager's encounter with the NF-104 so the film's writers took some liberty with history for dramatic effect.

The only movie nominated which had no music sound track was the silent film, *Wings*. In fact, it had no sound track at all except for piano music added by a live player in the theatre. Gary Cooper's first big role, as the doomed Cadet White, is found at:

<http://www.youtube.com/watch?v=UDz3XlZIdOA>

Flying in the movies is generally done by a group of pilots in the Motion Picture Pilots Association, a successor to the Association of Motion Picture Stunt Pilots. Perhaps the most famous of these was Paul Mantz, one of the earliest of the Hollywood pilots. He also served as an advisor to Amelia Earhart in her around the world attempted flight. He is most well known for the famous B-17 belly landing scene in *Twelve O'Clock High*. Not only did he receive, what was at that time a huge remuneration, but also was promised the remains of the B-17. According to Col Stidsen, the aircraft was severely damaged when it struck a pole supporting one of the tents. Unbeknownst to Mantz, one of the wooden poles had been replaced with a steel pole and not only sliced into the wing but shattered into a hail storm of shrapnel-like pieces. The scene is available at:

<http://www.youtube.com/watch?v=gi2NwU38NzA&feature=related>

Another hairy Mantz flying scene, reported by Tom Morehouse of the New England Air Museum, occurred while making in *Island in the Sky*. It involves a near miss between C-47s when one pops out of a cloud during a search mission. Mantz vowed never to attempt a scene like that again.

At the end of World War Two, Mantz purchased almost 500 aircraft from government surplus, thereby acquiring one of the largest air forces in the world. He sold off the gasoline still stored in the tanks which covered most of the cost of the purchase. He then joined with Frank Tallman to form Tallmantz, a company dedicated to supplying support to the movie industry. They provided the aircraft and crews for a plethora of Hollywood aviation productions. Unfortunately, Mantz was killed when the jury-rigged aircraft made from C-82 parts had a structural failure during the final filming of *The Flight of the Phoenix*.

Some of the pictures not mentioned here in which Tallmantz provided the flying are *It's a Mad, Mad, Mad, Mad World* with the famous flight through a Coca-Cola sign, *Charlie Varrick* featuring a crop dusting Stearman, *Murphy's War* with a Grumman Duck, *Ace Eli and Rodger of the Skies*, and the TV series *Baa, Baa Black Sheep*.

The actor who appeared most often in the movies mentioned was Jimmy Stewart, a real aviator, and combat veteran. He was often paired with June Allyson who almost made a career of playing his or some other man's faithful and harried wife. In one film related to aviation, *The Glen Miller Story* (1954), she plays the wife of Maj Glenn Miller, who served as an Army Air Force Special Services Officer and leader of the Air Force Band in World War Two. Miller, one of the most popular band leaders in the United States, was a 38 year old volunteer who left his successful music career to serve in the war. He was lost when a Norduyn Norsemen in which he was traveling to France disappeared over the English Channel.

Movies are more than just character, music, and spectacle. Aristotle points out that there are three other elements of drama: action, ideas, and language and it is the job of the writer to provide these. Ernest Gann, the dean of American aviation writers, also wrote screen plays.

Gann was an early airline pilot and flew with the Air Transport Command in World War Two. His aviation masterpiece, *Fate is the Hunter*, ought to be read by every pilot. An incident related in "Fate" provided the story line for *Island in the Sky*. Aside from "Island" and *The High and the Mighty*, he wrote or screen-played a number of other films. These include *Fate is the Hunter*, which disappointed him, *The Aviator*, *The Last Flight of Noah's Ark*, and *Blaze of Noon*.

Stalag 17 was written by Eighth Air Force combat veterans Donald Bevan and Edmund Trzcinski, both POWs held in Stalag XVII-B. Trzcinski also appears in a cameo in the film as a prisoner. Another Eight Air Force duo, Sy Bartlett and Bernie Lay, used their experiences to write *Twelve O'Clock High*.

But a cinema production needs direction also and one of the leading directors of aviation films is World War One flier, William Wellman. Wellman earns the laurel for several quality productions, *Wings*, *Island in the Sky*, and *The High and the Mighty*, as well as a host of other aviation films which include *Central Airport*, *Men with Wings*, and *This Man's Navy*, *Lafayette Escadrille*, *Gallant Journey*, *Thunderbirds*, *Young Eagles*, and *Legion of the Condemned*.

Hap Rocketto also pointed out some unusual casting in three of the movies. Edmund Trzcinski, one of the writers of *Stalag 17* also appears in a cameo in the film as a prisoner. In *Apollo XIII*, the Navy Captain who welcomes the astronauts aboard the *USS Iwo Jima* is Jim Lovell, the Commander of the Apollo XIII mission. And none other than Chuck Yeager appears as the bartender

of The Happy Bottom Riding Club in *The Right Stuff*.

If the reader wishes to see some of the other flying scenes mentioned, here are the references:

Strategic Air Command is worth watching for the B-36 startup and takeoff. Col Stidsen says take a look at the blue flight suits.

<http://www.youtube.com/watch?v=VGjyH2ulsCk>

An explanation of "Catch-22" and the mass B-25 take-off is located at:

<http://www.youtube.com/watch?v=kLNNWw1YHGg>

The Blue Max flight under a bridge could not be found but a World War Two TV drama, *Piece of Cake*, has a fine scene of a Spitfire doing the deed. Go to:

http://www.youtube.com/watch?v=_HdXdVvXc8w&feature=related

The flight home in the nose of a B-17 from *The Best Years of Our Lives* is at

<http://www.youtube.com/watch?v=SHXJW2fwjbk>

And finally, a fitting end to this series is the melancholy scene in an aircraft boneyard, also from *The Best Years of Their Lives*, in which Fred Derry, a veteran bombardier, failing to heal his personal life and unable to find a job, cuts his family ties and prepares to leave town. While waiting for his flight, he wanders through a field of partially dismantled aircraft, awaiting final disposal. Finding a B-17, he climbs up, clears away the cobwebs, brushes away the dust, and takes up his old position in the bombardier's station. As he reflects on the war, the foreman of

the work gang interrupts. On the spur of the moment, he asks for and is granted a job turning the war weary bombers into material for prefabricated housing, quite the reverse of his former role of bombardier. He removes his jacket and prepares to work, walking away from the ambiguously named B-17, "Round Trip?" This selection will be found at:

<http://www.youtube.com/watch?v=tU0d3DVcKoY&feature=related>

FADE OUT!